

<H.cover>24-Hour Water for Craiova, Romania

<t.cover>Craiova, Romania, a city of approximately 300,000 people, faced a problem common to many towns and cities in the region. Their public facilities and infrastructure were old and in serious need of repair or replacement. While many people knew that sewers and sewer treatment, solid waste, and building heating were important, there was one problem that every citizen in Craiova recognized every day as critical. Most homes and businesses received running water for as little as six hours a day, even though Craiova had more raw water than they needed. The following monograph tells the story of how the City of Craiova, Mayor Dan Nicolae, and some of his key partners used the process of strategic planning to develop systematic resolution of their water supply problem. Other communities facing similar infrastructure difficulties can learn the strategic planning process and benefit from Craiova's experience. The report was prepared by the International City/County Management Association (ICMA) with the assistance of the Romanian Federation of Municipalities. Funding for this report was provided by the United States Agency for International Development (USAID).

ICMA's International Municipal Programs

International Municipal Information Series Report

No. 7: Romania March 1995

Founded in 1914, the International City/County Management Association (ICMA) is a non-profit professional association committed to enhancing the quality and performance of local government administration throughout the U.S. and internationally. ICMA has over 8,000 members world-wide, including top appointed administrators, elected officials, members of the academic community, and other professionals who share the goal of improving local government.

The mission of ICMA's International Municipal Programs is to support and strengthen local government institutions in developing countries and emerging democracies. With the financial support of the U.S. Agency for International Development's Office of Environment and Urban Programs, ICMA is engaged in a wide range of technical assistance activities in Central and Eastern Europe, the New Independent States (NIS), Latin America, Asia, and Africa. ICMA provides an array of services, training programs, and authoritative publications on virtually every aspect of municipal government, management, and finance.

In 1993, the United States Agency for International Development (USAID) asked ICMA to carry out a Local Government Assistance Program in Romania. The goal of the Program is to encourage and support efforts to devolve responsibility, authority, and management of resources to local governments in Romania.

ICMA, working in close association with the Federation of Municipalities of Romania, has developed a program of technical assistance and training with the cities of Brasov, Constanta, Craiova, Focsani, Oradea, and Pietra Neamt.

©1995 International City/County Management Association

<TOC.ha>Contents

<h.page1>24-Hour Water for Craiova, Romania

<t1.intro>In Craiova, ICMA's assistance has focused on improving infrastructure systems and services. This report is based on the work carried out in Craiova by ICMA Consultants Paul Hendricks, Lance Decker, and Greg Binder. This report was funded by USAID under the Local Government and Housing Privatization Project for Central and Eastern Europe (Contract No. EUR-0034-C-00-2034-00, Request for Services #99). The consultants and ICMA are grateful to the Mayor of Craiova, Mr. Dan Nicolae, for his interest in and support of this work.

<dropcap>Mayor Dan Nicolae, Mayor of Craiova, Romania, understood the importance of drinking water to his city, and he had some concerns about Craiova's water infrastructure. In early 1993, his concerns were confirmed by an ICMA engineering consultant under a USAID-funded project. The consultant had recently completed a comprehensive assessment of Craiova's infrastructure needs and recommended that management implement a number of short-term, high impact actions that would show immediate improvement. In the area of water supply his advice would not work so quickly. He suggested that Craiova develop a long-term strategic improvement plan.

<t>The improvement plan process started when Mayor Nicolae formed a fourteen-member Strategic Planning Team (the Team) to study the complicated issues at hand, challenging them to find an acceptable and effective approach to 24-hour a day water delivery. The Team consisted of representatives from many organizations involved in the issues. Mayor Nicolae recognized that decision-makers and stakeholders should be personally involved in the discussions. Commitment of resources would be required and coordination of efforts essential.

<t>The Team's job was to work together to find solutions, yet collaboration and cooperation of this type had been rare in the past. Each organization was accustomed to significant autonomy and authority, and for this reason, USAID and ICMA were asked to supply support staff experienced in building public management partnerships.

<t>The support group consisted of three U.S. consultants: the engineer who conducted the earlier infrastructure assessment for Craiova was the project leader and liaison with the Team, a local government strategic planner was responsible for group process design and on-site facilitation services, and an information manager with the City of Phoenix, Arizona, furnished the technology support and analysis of information generated by the Team.

<t>In February 1994, the Team and support group gathered in the Craiova City Hall to launch a three-day strategic planning seminar. An additional twenty-five interested managers and public officials from related organizations attended the sessions to observe and learn about the planning methodology being used. During those three days participants and observers discussed, debated, argued, and analyzed hundreds of ideas generated by the group for achieving 24-hour water. By the end of the third day the Team successfully decided what specific actions they would take to make 24-hour water a reality. They identified who would be responsible for each action, and for each action they established a date for completion. The group identified their strategic partners and listed what each of those partners would do as their portion of the project. After discussions with all the partners in the project, the Team identified what the partners would contribute in time, equipment, human resources, and money.

<t>As a result of their work, late in 1994 the Team submitted an application for financing their 24-hour water plan to the European Bank for Reconstruction and Development (EBRD) and received approval for \$2 million in assistance.

#### <sha>Overview of Strategic Planning

<st1>A metaphor used by frustrated government officials in the United States goes like this: "We are so busy fighting the alligators that we never find time to drain the swamp." It means "the emergencies that we face are so demanding that we fail to cure the problems at the root of the crisis." Strategic planning is a systematic process that helps public officials develop long-term direction in a collective setting. To use the swamp metaphor, if we can develop methods to drain the swamp, the alligators will leave and cease to be a problem. Often strategic planning must overcome the public manager's attention to urgent needs, requiring an investment of time to identify and prioritize what is truly important, over the long term, to the organization.

<st>Unfortunately, strategic planning is not without its difficulties. It takes time to do the research and discover the intricacies of the issues facing the organization. It takes patience to develop the alternative actions and create consensus on direction, and because change is usually the result of strategic planning, organizational pain and suffering must be anticipated. Time, patience, and suffering increase as the numbers of people involved, and the intensity of the issues, increase.

<st>Since no one likes the unpleasant parts of strategic planning, planners have developed a series of standard questions for their clients to use as guides that help ease the discomfort. In their simplest form, these questions are as follows:

<stb1>Where are we today?

<stb>Where do we want to be at a specific date in the future?

<stb2>What specific actions will we take to achieve the future desired state?

#### <ha>A Perspective on Craiova and Water

<t1>An adequate supply of fresh water has always been one of the highest priorities of city planners and builders. Yet even in places where there is abundant water, cities face serious problems involving water quality, high cost, and difficulties in distribution. By its very nature as a requirement for human existence, water is a strategic issue for all cities and the people who manage those cities. Craiova is no exception.

<t>Craiova was facing serious water problems. The *Regia Autonoma Apa Canal Temoficare* (a public corporation responsible for delivering water) was unable to supply water to many of the City's businesses and residents on a full-time basis. Many people had water only six hours per day.

<t>Craiova's water problems were not caused by a fundamental lack of water. In fact, Craiova had sufficient water to provide businesses and residents with a full-time supply, but water was often wasted. For instance, to compensate for periods without service, people would store water in their bathtubs for later use. They kept their faucets open so as not to miss the opportunity to receive water, and by doing so allowed air to fill the pipes and water to drain from the system. This action caused waste and additional delays in receiving water subsequently.

<t>The lack of 24-hour water created economic problems, too. It became increasingly more difficult to attract and expand the businesses and industries that were so important to Craiova's future. What business would want to locate an enterprise in a city that cannot guarantee constant delivery of water?

#### <ha>Two Key Problems

<t1>There were many incidental problems creating the difficulties described above, but the two that seemed most critical to the Regia trying to provide 24-hour water involved a reluctance to account for and charge for their basic product--water--and a lack of inter-jurisdictional cooperation.

<t>The idea of paying for water was new to many residents of Craiova. Water had been a "free good" that was part of a citizen's rights, and not something for which a payment was due. Little attention was paid to the cost of water, and usage was not measured. Since there was no price placed on water, no individual value was perceived by the consumer. This condition encouraged waste. To the managers responsible for supplying water to Craiova, the connection between water conservation and a 24-hour water supply was clear.

<t>With respect to inter-jurisdictional cooperation, Craiova received a large portion of its water from sources many kilometers to the north. The pipes carrying the water crossed many jurisdictions, and each jurisdiction required compensation for the privilege of using their right-

of-way. In addition, there were several overlapping political districts that felt varying degrees of responsibility and authority over the acquisition, supply, treatment, and distribution of water in Craiova. For instance, the City of Craiova and its citizens used the water. The Regia treated and distributed it. The Judet Council had a role in water supply. The Romanian national government centered in Bucharest provided financing for infrastructure improvement. Each jurisdiction had some role, but no single jurisdiction had full control. Since improving the current system so that it could deliver 24-hour water would be an expensive and complicated task, the political energy needed to make such a venture successful demanded that all jurisdictions communicate, collaborate, and cooperate.

## <h2>Strategic Planning Process Used by the Craiova Team

### <h3 after h2>Before the Process Started

<t1>Prior to the February seminar the ICMA consultants reviewed the reports on the water situation and developed an initial three-day group process design. The consultants developed overall outcomes and detailed draft agendas for the USAID-sponsored seminar. The materials and equipment needed to support the agendas and ensure process outcomes were assembled in the United States and packed for transport to the seminar site. Logistics proved important to this engagement because the electronic apparatus and power supplies required for several important exercises were unavailable in Craiova.

<t>The ICMA consultants worked with the lead interpreter to become familiar with the key participants in Craiova. For one full day in advance of the actual planning session, Mayor Nicolae and his staff worked with the consultants, helping them become familiar with the issues and the background of each Team member.

### <h3>Day One

<photos go here>

<t1>On the first day Team members were welcomed by the Mayor and his staff. After a brief explanation of the concepts of strategic planning, the Team was introduced to the primary planning tools they were to use during the three days. Those tools included white 3x5 index cards, multiple colors and sizes of other card stock, felt tipped markers, push pins, storyboards (in Craiova theatrical flats were substituted), and the Team's favorite tool of all..."killer balls." (Killer balls are soft, yarn balls provided by the strategic planning consultant and used by participants to release emotional tension during the sessions. When a negative comment is made by a participant, one or more of the others may respond by throwing killer balls at the offender.)

<t>This assortment of tools and gimmicks was used throughout the three days to construct a written, visual record of all ideas, options, and decisions the Team made. Termed "visual planning methods" or "storyboarding," this process had been used successfully in the United States with public sector agencies for several years. It was the ICMA consultants' belief that

these techniques could bridge specific cultural and organizational obstacles anticipated in the planning process.

<t>The Team started planning by reviewing historical problems they faced with respect to 24-hour water. They developed the key questions to be answered by the end of the three-day seminar. The Team then established discussion boundaries and "rules of engagement" which they all agreed to follow during their meetings. They also developed a list of "basic assumptions" by which they would test their ideas and options during the three days.

#### <hc>SWOT Analysis

<t1>The balance of the first morning was used to complete a SWOT analysis and develop a mission statement. (SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. Strengths and weaknesses refer to the internal workings of an organization that would help or hurt progress towards a stated objective and that might be controlled or significantly influenced by the organization's efforts. Opportunities and threats consider the external factors outside the organization's influence that might have consequences, either positive or negative, to achievement of a stated objective.)

<t>The Team identified the competency of their leaders, technicians, and workers and the availability of contractors as internal strengths. They indicated that the lack of capital funds and a shortage of materials for waterline maintenance were internal weaknesses. The Team noted that uncertainty in East/West politics could create either an opportunity or a threat to Craiova's chances of obtaining infrastructure financing. Also, the inadequate supply of materials for infrastructure improvement on world markets would seem to be a threat to Craiova's objective of 24-hour water.

<t>The process of SWOT analysis sensitized the Team to the importance of identifying as many facts related to the issues as possible in a systematic way. The SWOT should be completed before suggesting options for fixing problems.

#### <hc>Mission

<t1>As a result of this and other small group discussions, the Team created the following mission statement for themselves: *The mission of the Team is to provide responsible participation for all organizations concerned with providing, in the shortest time, a good quality of water, in a sufficient quantity, at minimal cost for consumers, 24 hours a day.*

#### <hc>Key Result Areas (KRAs)

<t1>The Team selected priorities on which to concentrate most of their energy. The selected areas, termed key result areas (KRAs), were:

<tn1>managerial competence

<tn>assurance of financial resources

<tn>assurance of water sources

<tn>education of consumers

<tn2>development and modernization of the water system.

<t>As the end of the first day of planning approached, the group realized that they could not fully analyze all five KRAs during the next two days. Therefore, the Team selected two areas to discuss on Day 2 that could produce the greatest benefit to achieving 24-hour water: water metering and infrastructure improvement financing.

<hb>Day Two

<hc>Group Dynamics

<t1>Something unusual happened the second day: not only did all the participants return to the planning session to continue the process, but there were also additional observers. The engineering consultant explained that in past meetings, there had been a normal decline by the end of the first day, and attendance on subsequent days had continued to fall. In this case, however, people not only stayed for the full first session, but returned bringing friends and colleagues to watch. Something--the content of the discussion, the resources being appropriated, the decisions being made, or the group process techniques used--was keeping the group engaged in the process.

<t>Day 2's Decision Support Analysis (DSA) would certainly test the Team's commitment to the planning process. Although highly interactive, DSA requires intensity and focus. Normally the support group would not use DSA with more than fifteen people, and there were almost fifty people in the room.

<hc>Decision Support Analysis (DSA)

<t1>DSA is a computer-supported strategic planning tool used to help groups cope with highly complex, multidimensional issues. It consists of a matrix where each row describes a specific alternative that the group might select, and each column lists an important feature of the decision used to analyze the alternative. The alternatives are identified and described in detail by the group before formal analysis. The features are defined prior to analysis, but they are also weighted to reflect their relative importance, to each other and to the whole decision. A computer is used to keep score of the responses from each participant. Once all the data is gathered the computer displays the results graphically on an overhead projector for all to see. "If...then" scenarios can be constructed to determine how sensitive each alternative is to a change in the weight of each factor.

## <sha>Decision Support Analysis: Financing Alternatives

<l11> Cost	Population Political	Resource Final	Local Council	Cost of the	Regia's						
<l11>Alternatives n Total	Legal Benefit	Acceptance Feasibility	Availability Score	Position	Operation	Positio					
<l11>Factor Weight	21	11	21	18	23	7					
<l11>Central Budget	1404	1221	1298	1470	2057	745	8196	1.59	1.41	18380	
<l11>Local Budget	1693	1166	1490	1890	2011	819	9069	1.76	1.63	25953	
<l11>Plant's Own Financial Sources	619	913	830	1138	1463	316	5278	0.96			
1.09	5485										
<l11>Tax Added to Water Bill		1693	638	1639	1698	1417	544	7628	1.20		
1.20	10985										
<l11>USAID	1713	1056	1809	1593	2103	658	8932	1.57	1.51	21255	
<l11>Bank Loans	846	528	1554	1033	1120	228	5309	0.73	0.81	3150	

<t>During the two DSA sessions completed with the Team in Craiova, the group identified preferred positions on financial and operational topics and came to consensus on specific actions they would take. Day 2 was completely devoted to the DSA process.

### <hc>DSA #1

<t1>The first DSA session focused on water metering. The Team identified many alternative strategies to consider, but selected only three for the final analysis. Included were water meters installed at the source, water meters installed on the main distribution lines, and meters installed at the point of water consumption.

<t>The Team then identified the significant factors impacting the decision on these alternatives. They selected and weighted the top six factors that had the most influence on the decision to install water meters. The final factors were investment costs, operation and maintenance costs, level of information generated, social factors and impacts, reliability of equipment procurement, and ease of meter maintenance.

<t>The Team compared each alternative against each factor, cell by cell. Through a quantitative voting process, Team members selected the alternative of metering at the point of water consumption. The group agreed that this alternative showed the most promise for achieving the desired results in Craiova.

### <hc>DSA #2

<t1>The second DSA session considered the issue of how to pay for infrastructure improvements. Unlike the earlier DSA session on water meters, the result was not a single decision but a prioritized listing of alternatives that the Team believed would generate the greatest possibility for success.



<t>At the end of Day 2 the support group challenged the Team to repeat the planning processes just learned with key individuals in their own organizations. This needed to be done as soon as possible to get their thoughts on the proposals. Although the Team produced a good plan, it needed much more detail if Craiova was to have 24-hour water. Participants agreed they had learned much in the previous two days, and if the learning were to permanently transfer, it had to be practiced right away. To achieve this, Team members were assigned specific responsibilities for reproducing the planning sessions and completing formal action plans.

### <hb>Day Three

<t1>Team members and observers once again filled the room to capacity. The topic for Day 3 was "action planning" and, as the title would suggest, participants determined the most appropriate actions Craiova could take to supply water 24 hours a day. The Team separated into small groups, often including the observers in their discussions. Conversation centered on the methods and sources of financing, and the specific actions the Team needed to take to acquire that financing. As part of the process the Team also identified people outside the formal Team who had to be specifically included in the planning process. These people were termed "partners" because without their approval and help, the objective of 24-hour water could not be achieved.

<t>Once the Team agreed on the list of actions and partners, they placed the actions into a crude sequence and decided which Team member would be the person responsible for seeing that the action was completed. Only after responsibility for performance was fixed did the Team help that person choose a date for completion.

<t>The reception sponsored by the ICMA support team following Day 3 gave participants and observers an opportunity to celebrate their success and talk informally with their new partners in 24-hour water. Questions of group process theory were also discussed and new ideas shared.

### <ha>The Results

<t1>The effect of the three-day ICMA planning seminar can only be fully assessed over the long term. As of this report, however, it appears Mayor Nicolae and his Team are making significant progress toward achieving their objective. From February through June the Team expanded the details of their plan. By mid-1994 Craiova had a business-oriented strategy ready for distribution highlighting the specific steps Craiova and its partners would take. The plan stated the expected results the City would receive if they met their objectives; addressed the Regia's plan to pay for operation and maintenance of the new improvements; and discussed how Craiova could attract new industry, improve their economic future, and enhance the quality of life for citizens.

<t>In late 1994 the 24-hour water plan was presented for financial assistance to the European Bank for Reconstruction and Development (EBRD), and Craiova received commitments for \$2 million in loans to install bulk water meters, data loggers, and consumer water meters. Implementation of this plan means that the City will have data on how much water is being used,

and by whom. The billing system to be subsequently implemented based on this data will ensure a sound fiscal condition for the water enterprise.

<t>The strategic planning process led by Mayor Nicolae and his Team allowed Craiova to:

<tb1>define its needs

<tb>identify its partners

<tb>prioritize its objectives

<tb>identify the specific actions to be taken

<tb2>strategically apply scarce resources to make the goal of 24-hour water come true.

<t>In addition, the USAID/ICMA effort developed the capacity of Craiova's managers and public officials to use the strategic planning process in the future, demonstrating the transferability of business-based strategic planning techniques and skills to local governments in other parts of the world.

#### <sha>Key Questions in the Strategic Planning Process

<st1>The following are the key questions to ask when conducting a strategic planning process. The information generated by these questions builds sequentially, so the questions should be asked in order. The information generated should be referred to frequently during the process. Many of the questions below are not applicable to less complicated circumstances.

#### <shb>Pre-Planning Activities

<stb1>What are the issues that need to be examined?

<stb>What is the planning horizon; how far will the plan extend into the future?

<stb2>Who are the specific people who have a stake in the issues?

#### <shb>Historical Events and Trends

<stb1>What key events and actions in the past brought us where we are now?

<stb2>What historical trends can we perceive?

#### <shb>External Analysis

<stb1>What external factors are currently changing that should have our attention?

<st>Political

<st>Economic/Financial

<st>Sociological or demographic

<st>Technological

<st>Industry (if the organization is in direct competition with others)

<stb>How might these changes impact the organization? Are they opportunities or threats?

<stb2>How might we respond to these changes?

<shb>Internal Analysis

<stb1>Who are our constituents (stakeholders)? What do they expect?

<stb>What talents do we have? What talents do we lack?

<stb>What resources do we have? What resources do we lack?

<stb>What do we currently do well as an organization?

<stb2>What do we currently do poorly as an organization that we need to do well?

<shb>Strategic Assumptions

<stb1>What facts about these issues will help us make our decisions?

<stb>What assumptions can we, should we or must we make about these issues?

<stb>On what do we base those assumptions?

<stb>What key information and assumptions remain unclear?

<stb>What data is currently unavailable that is needed to make good decisions about the future?

<stb2>On what do we agree? On what do we disagree?

<shb>Mission

<stb1>What "business" are we in? What product or service do we provide?

<stb>Who are our customers (stakeholders)? What do they expect?

<stb>What is our market? What is our niche within that market?

<stb>What do we hope to accomplish and why is it important?

<stb>What is the organization's overall direction?

<stb2>How can we personally contribute to the organization's future?

<shb>Values & Visions

<stb1>What values are essential to us?

<stb>What does the organization stand for? What is important to us?

<stb>What will we always do? What will we never do?

<stb2>What is the organization's hope for the future? What do we want to ultimately be?

<shb>Key Result Areas (KRAs)

<stb1>Within the environment in which we work, what overall areas of concern will determine our success or failure during the planning period?

<stb>If we are successful in achieving our vision of the KRAs, what will our environment look like at the end of the planning period? How will it have changed from what it is now?

<stb2>Who, specifically, will be responsible for the overall achievement of each KRA?

<shb>Strategic Objectives

<stb1>Within the selected KRAs, what do we need to accomplish to be successful?

<stb>Are the objectives we have established detailed and specific enough to know when we have succeeded or failed?

<stb>Are the objectives measurable and verifiable?

<stb>Do these objectives test our skills and talents, or can they be achieved with little effort?

<stb>Are the objectives within the realm of possibility?

<stb>Do the objectives have specific dates for completion?

<stb2>Who, specifically, will be responsible for the overall achievement of the objectives?

#### <shb>Action Plans and Tasks

<stb1>What must be done to implement the KRAs, objectives, and actions?

<stb>For each objective, what major actions do we collectively agree to take?

<stb>Who will be responsible for each major action?

<stb>When will these major actions be completed?

<stb>For each major action, what are the specific, detailed tasks that lead to completion?

<stb>In what order will we undertake these tasks?

<stb>When will each task be initiated? Completed?

<stb2>For each task, who is responsible for seeing it is completed?

#### <shb>Resource Allocation

<stb1>What resources are needed to achieve the KRAs, objectives, and actions?

<stb>What resources are currently available?

<stb>What resources do we need but do not have?

<stb2>How will we fill the resource gap?

#### <shb>Monitoring and Evaluation

<stb1>What methods will we use to evaluate our progress?

<stb>How often will we evaluate our progress?

<stb>What process will we use to make changes to our plan?

<stb2>How will we let all the people involved in the plan, and specifically those who are responsible for plan elements, know whether they are succeeding or failing?